

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : GERS-BARLAG et al.
SERIAL NO. : Not yet assigned
FILED : 21 February 2002
FOR : EMULSIFIER-FREE FINELY DISPERSE SYSTEMS OF THE
OIL-IN-WATER AND WATER-IN-OIL TYPE
ART UNIT : 1619
EXAMINER : Michael G. Hartley

21 February 2002

Hon. Commissioner of Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

SIR:

Prior to examination, please amend the above-identified application as follows:

IN THE CLAIMS:

Please cancel claims 1-13 and add new claims 14-26 (see next page):

14. A Pickering emulsion, said Pickering emulsion being a finely dispersed water-in-oil or oil-in-water system, said Pickering emulsion comprising:
- a) an oil phase comprising at least one wax and/or at least one oil thickener;
 - b) an aqueous phase;
 - c) microfine particles, said microfine particles being metal oxides:
 - i) having an average particle size of less than 200 nm;
 - ii) being dispersible both in water and in oil; and
 - iii) having both hydrophilic and lipophilic properties resulting in amphiphilic character; and
 - d) at most 0.5% by weight of one or more emulsifiers.
15. Pickering emulsion according to Claim 14, which is emulsifier-free.
16. Pickering emulsion according to Claim 14, wherein the content of the particles is between 0.1% by weight and 30% by weight, based on the total weight of the preparations.
17. Pickering emulsion according to Claim 14, wherein the particle diameter of the particles used is between 5 nm and 100 nm.
18. Pickering emulsion according to Claim 14, wherein the particles have been surface-treated to repel water, where the amphiphilic character of the particles is formed or retained.
19. Pickering emulsion according to Claim 14, wherein the total amount of one or more waxes and/or oil thickeners in the emulsion is chosen to be from the range of 0.5 to 20.0% by weight, based on the total weight of the preparations.

20. Pickering emulsion according to claim 19, wherein the total amount of one or more waxes and/or oil thickeners in the emulsion is between 1.0 and 5.0% by weight, based on the total weight of the emulsion.
21. Pickering emulsion according to Claim 14, wherein the waxes and/or oil thickeners together with other oil components of the emulsion form a material which is paste and spreadable at room temperature and which has a viscosity of more than 5000 mPa•s at 20°C.
22. Pickering emulsion according to Claim 14, wherein the wax(es) is/are selected from the group consisting of the natural waxes, synthetic waxes and mixtures thereof.
23. Pickering emulsion according to Claim 14, wherein the oil thickener(s) is/are selected from the group consisting of metal soaps, layered silicates and mixtures thereof.
24. A method of providing skin care, said method comprising applying to skin an emulsion according to any one of claims 14-23.
25. A method of stabilizing a cosmetic or dermatological Pickering emulsion comprising of:
 - a) an oil phase;
 - b) an aqueous phase;
 - c) microfine particles, said microfine particles being metal oxides:
 - i) having an average particle size of less than 200 nm;
 - ii) being dispersible both in water and in oil; and
 - iii) having both hydrophilic and lipophilic properties resulting in amphiphilic character; and
 - d) at most 0.5% by weight of one or more emulsifiers,

which consists of adding at least one wax and/or oil thickener to said Pickering emulsion.

26. The method of claim 25 wherein the at least one wax is selected from the group consisting of natural waxes, synthetic waxes and mixtures thereof and the at least one oil thickener is selected from the group consisting of metal soaps, layered silicates and mixtures thereof.

REMARKS

Claims 1-13 have been cancelled and claims 14-24 have been added. Claims 14-26 are now pending. Although claims 14-26 are broader in scope than the claims allowed in 09/396,918, they still represent a narrower embodiment of originally filed claims 1-13. As such, it is believed that no new matter has been added.

Claims 14-24 correspond to the claims allowed in parent application 09/396,918 with the exception of the coating limitation (see attached sheet for comparison of claims), i.e. the scope of the claims has been expanded so that the amphiphilic metal oxide microfine particles are not limited by the means by which they are made to be amphiphilic.

Claims 25 and 26 correspond to claim 13, the subject matter of which was cancelled during the prosecution of the parent application.

If the only issue preventing allowability of the claims is the lack of a terminal disclaimer to overcome a obviousness-type double patenting rejection, the examiner is encouraged to telephone the undersigned (A faxed copy of the appropriate terminal disclaimers can be provided within 48 hours or less - Given the cost (\$110 per terminal disclaimer), the applicants prefer not to file the terminal disclaimers until there is an indication of allowable subject matter.)

Early and favorable action is earnestly solicited.

Respectfully submitted,
NORRIS McLAUGHLIN & MARCUS, P.A.

By Howard C. Lee
Howard C. Lee
Reg. No. 48,104

HCL:vif

Beiersdorf 582.2-HCL
6713-Dr. Rswk

Attachments: Comparison of pending claim 14 and claim 14 from 09/396,918

220 East 42nd Street
30th Floor
New York, New York 10017
(212) 808-0700

CERTIFICATE OF MAILING

I hereby certify that the foregoing Preliminary Amendment is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Hon. Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below:

Date: **21 February 2002**

By Howard C. Lee
Howard C. Lee

COMPARISON OF PENDING CLAIM 14 AND CLAIM 14 OF 09/396,918

14. (PENDING CLAIM SHOWING DIFFERENCES FROM CLAIM 14 OF '918)

A Pickering emulsion, said Pickering emulsion being a finely dispersed water-in-oil or oil-in-water system, said Pickering emulsion comprising:

- a) an oil phase comprising at least one wax and/or at least one oil thickener;
- b) an aqueous phase;
- c) microfine particles, said microfine particles being metal oxides:
 - i) having an average particle size of less than 200 nm;
 - ii) being dispersible both in water and in oil; and
 - iii) having both hydrophilic and lipophilic properties resulting in amphiphilic character;
[and
 - iv) **being selected from the group consisting of metal oxides, which are coated on the surface thereof with:**
 - (A) a dimethylpolysiloxane and/or silica gel; and**
 - (B) aluminium hydroxide and/or alumina and/or silicon dioxide;] and**
- d) at most 0.5% by weight of one or more emulsifiers.

14. (FROM '918)

A Pickering emulsion, said Pickering emulsion being a finely dispersed water-in-oil or oil-in-water system, said Pickering emulsion comprising:

- a) an oil phase comprising at least one wax and/or at least one oil thickener;
- b) an aqueous phase;
- c) microfine particles, said microfine particles:
 - i) having an average particle size of less than 200 nm;
 - ii) being dispersible both in water and in oil;
 - iii) having both hydrophilic and lipophilic properties resulting in amphiphilic character;
and
 - iv) being selected from the group consisting of metal oxides, which are coated on the surface thereof with:
 - (A) a dimethylpolysiloxane and/or silica gel; and
 - (B) aluminium hydroxide and/or alumina and/or silicon dioxide;
- d) at most 0.5% by weight of one or more emulsifiers.